

CLAIMS

1. (original) A process for preparing a blow molding preform, comprising:
melting polymer flakes in a plasticating screw extruder, to prepare a homogeneous stream of hot polymer melt at the discharge of the extruder;
cooling the polymer melt stream to a temperature at least 20 degrees Centigrade below the extruder discharge temperature, by heat exchange with a liquid heat transfer medium; and
forming the cooled polymer melt into a blow molding preform.

2. (original) The process for preparing a blow molding perform according to Claim 1, wherein the polymer comprises polyethylene terephthalate, polyolefin, polyester, polyamide, acrylonitrile acid ester, vinyl chloride, or a derivative, blend, or a copolymer thereof.

3. (original) The process for preparing a blow molding preform according to Claim 2, wherein the polymer comprises polyethylene terephthalate.

4. (original) The process for preparing a blow molding perform according to Claim 1, wherein the polymer flakes comprise an average mean particle size from about 1/8 to about 3/4 inch.

5. (original) The process for preparing a blow molding perform according to Claim 1, wherein the temperature of the polymer melt at the discharge of the extruder ranges from about 225 degrees Centigrade to about 325 degrees Centigrade.

6. (original) The process for preparing a blow molding perform according to Claim 5, wherein the temperature of the polymer melt at the discharge of the extruder ranges from about 260 degrees Centigrade to about 290 degrees Centigrade.

7. (original) A process for preparing a blow molding preform, comprising:
melting polymer flakes, comprising polyethylene terephthalate, polyolefin, polyester, polyamide, acrylonitrile acid ester, vinyl chloride, or a derivative, blend, or a copolymer thereof, in a plasticating screw extruder, to prepare a homogeneous stream of hot polymer melt at the discharge of the extruder, the temperature of the polymer melt at the discharge of the extruder ranging from about 225 degrees Centigrade to about 325 degrees Centigrade;
cooling the polymer melt stream to a temperature at least 20 degrees Centigrade below the extruder discharge temperature, by heat exchange with a liquid heat transfer medium; and
forming the cooled polymer melt into a blow molding preform.

8. (original) The process for preparing a blow molding perform according to Claim 7, wherein the polymer comprises polyethylene terephthalate.

9. (original) The process for preparing a blow molding perform according to Claim 7, wherein the temperature of the polymer melt at the discharge of the extruder ranges from about 260 degrees Centigrade to about 290 degrees Centigrade.

10. (original) A process for preparing a blow molding preform, comprising:
melting polymer flakes, comprising polyethylene terephthalate, in a plasticating screw extruder, to prepare a homogeneous stream of hot polymer melt at the discharge of the extruder, the temperature of the polymer melt at the discharge of the extruder ranging from about 260 degrees Centigrade to about 290 degrees Centigrade;
cooling the polymer melt stream to a temperature at least 20 degrees Centigrade below the extruder discharge temperature, by heat exchange with a liquid heat transfer medium; and
forming the cooled polymer melt into a blow molding preform.